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Gregory H. Boyce
Director, Environmental Affairs



D.w. Hedberg

DIVISION OF OIL, GAS & MINING

July 1, 1986

Kennecott

Mr. Lowell P. Braxton
Administrator
Mineral Resource Development
and Reclamation Program
Division of Oil, Gas and Mining
Utah Department of Natural Resources
365 West Temple
Three Triad Center, Suite 350
Salt Lake City, Utah 84150



SUBJECT: Utah Copper Division Modernization Project

Dear Mr. Braxton:

Enclosed for incorporation into the "Phase II" package of Kennecott's Mining and Reclamation Plan Amendment is the information requested in your tentative approval letter of June 27, 1986.

- o A complete copy of the correspondence between the Utah Department of Health and Kennecott will be provided after a permit is issued by the Bureau of Water Pollution Control. This package will address:
  - Plans for the containment and recovery of potential leaks from the twin 48-inch pipeline.
  - Details regarding the groundwater monitoring program for the area downgradient of the proposed grinding plant site and pipelines.

Kennecott formally requests a variance to Rule M-10(7) for the ore slurry pipeline, the return water pipeline, the service road paralleling the pipelines, the service road in the ore conveyor corridor and the plant access road. The pipelines will be used after permanent mine closure to divert mine runoff away from the populated areas downgradient from the mine. The service road parallel to the pipeline will continue to be used as a maintenance road. The ore conveyor corridor service road and the plant access road will be used to access the southern terminus of the pipelines. The corridors containing the service roads and the plant access road are delineated on the enclosed Exhibit A, "Disturbed Area Location." Kennecott will continue to be responsible for maintenance of these facilities unless other arrangements are completed.

Set's 7-80 mes for

Mr. Lowell P. Braxton July 1, 1986 Page Two A revision of drawing 712-SKC-3-152 (Exhibit A, "Disturbed Area 0 is enclosed. 0 For Ore Conveyor Corridor (Parsons) are enclosed. utilized on the grinding plant site. 0

Location") delineating the entire permit and disturbed area boundaries

- Specification 17594-GC-005, "Grading of Flotation Feed Pipeline Corridor" (Bechtel) and specification SPC-10-CE-6300-602, Earthwork
- Because the ore conveyor corridor, pipeline corridor and plant access road corridor will remain intact after permanent mine closure, the permanent seed mixture will be utilized during post-construction planting of these areas. The post-construction seed mixture will be
- A more detailed reclamation cost breakdown for reclamation is given in the attached Tables 1 through 10.

Please advise us of the final bonding amount so that bond arrangements may be completed in a timely manner. If additional clarification is required. please contact Al Trbovich (322-8263).

Stegm N /mce G. H. Boyce

AMT/GHB/mf Attachments

cc: V. R. Rao, w/attach.

S. D. Taylor, w/attach. A. M. Trbovich, w/attach.

TABLE 1

#### EARTHWORK DETAIL

## DEMOLITION AND DISMANTLING ESTIMATE FOR BOND ESTIMATE

<u>Item</u>	Quantity
Fill and Compact Coarse Ore Stockpile Cavity	50,000 cy
Fill and Compact Grinding Building Cavity	35,000 cy
Fill and Compact Slab on Grade	10,000 cy
TOTAL	95,000 cy

# TABLE 2

#### CONCRETE DEMOLITION DETAIL

## DEMOLITION AND DISMANILING ESTIMATE FOR BOND ESTIMATE

Item	Quantity	Manhours
Structural Concrete Coarse Ore Storage Grinding Plant Tanks and Miscellaneous Subtotal	100 cy 200 cy 100 cy 400 cy	3,200
Equipment Foundation Concrete SAG Mills Ball Mills Miscellaneous Equipment Subtotal	650 cy 1,500 cy 200 cy 2,350 cy	4,700
Elevated Concrete	1,560 cy	6,240
TOTAL	4,310 cy	14,140

TABLE 3

STEEL DEMOLITION DETAIL

DEMOLITION AND DISMANTLING ESTIMATE FOR BOND ESTIMATE

<u>Item</u>	Quantity	Manhours
Grinding Building Structural Steel	3,470 st	12,145
Coarse Ore Stockpile Structural Steel	1,402 st	3,080
Miscellaneous Structural Steel	310 st	1,550
Secondary Steel	792 st	3,960
Miscellaneous Iron	199 st	1,000
Bridge Steel, Bents and Trusses	902 st	4,510
TOTAL	7,075 st	26,245

TABLE 4

BUILDING FINISH DEMOLITION

DEMOLITION AND DISMANTLING ESTIMATE FOR BOND ESTIMATE

Item	Quantity	Manhours
Grinding Building Siding	161,000 sf	3,220
Grinding Building Roofing	201,000 sf	6,030
Pre-Engineered Buildings		
Building 1	375 sf	
Building 2	7,200 sf	
Building 3	432 sf	<del>-</del>
Building 4	800 sf	
Building 5	7,200 sf	
Subtotal	16,007 sf	4,000
Truck Scale Pit	750 sf	500
TOTAL	387,757 sf	13,750

TABLE 5

MECHANICAL BULKS DEMOLITION (TANKS)

DEMOLITION AND DISMANTLING ESTIMATE FOR BOND ESTIMATE

<u>Item</u>	Quantity	Manhours
Ductwork, Chutes and Liners	789 st	8,000
Bins and Hoppers	118 st	1,000
Small Steel Tanks	62 st	500
Other Tanks	198 st	1,100
TOTAL	1,167 st	10,600

TABLE 6

PLANT EQUIPMENT DEMOLITION

DEMOLITION AND DISMANTLING ESTIMATE FOR BOND ESTIMATE

Item	Quantity	Manhours
SAG Mills (3 each)	3,000 st	15,000
Ball Mills (6 each)	3,270 st	16,350
Belt Conveyors	510 st	4,700
Other Equipment	2,600 st	12,000
TOTAL	9,380 st	48,050

TABLE 7

#### PIPING DEMOLITION

# DEMOLITION AND DISMANILING ESTIMATE FOR BOND ESTIMATE

<u>Item</u>	Quantity	Manhours
Grinding Building	87,000 lf (435 st)	21,750
Coarse Ore Stockpile	2,000 lf (6 st)	250
Lime Plant	9,890 lf (35 st)	1,400
TOTAL	476 st	23,400

## TABLE 8

# ELECTRICAL EQUIPMENT DEMOLITION

# DEMOLITION AND DISMANILING ESTIMATE FOR BOND ESTIMATE

<u>Item</u>	Quantity	Manhours
Switchgear	61 each	1,500
Transformers	43 each	1,500
Capacitors	70 each	1,500
Light Fixtures	1,493 each	800
Bus Bar	960 lf	500
Miscellaneous Equipment	1 Lot	750
TOTAL		6,550

TABLE 9
CABLE TRAYS AND CONDUIT DEMOLITION

# DEMOLITION AND DISMANTLING ESTIMATE FOR BOND ESTIMATE

<u>Item</u>	Quantity	Manhours
Cable Trays	32,720 lf	6,600
Conduit	118,674 1f	11,400
TOTAL	151,394 lf	18,000

### TABLE 10

### WIRING AND CABLE DEMOLITION

# DEMOLITION AND DISMANTLING ESTIMATE FOR BOND ESTIMATE

<u>Item</u>	Quantity	Manhours
Wire and Cable on Trays	300,000 lf	3,000
Five KV Line	48,130 lf	2,000
TOTAL	348,130 lf	5,000